

Operation/Reference Guide

MIO R-1 AUDIO

Tango Distributed Audio Remote Control



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Table of Contents

Overview	1
Specifications	2
Touch And Tilt Sensor	2
MIO R-1 AUDIO Setup	3
Installing Your Custom Buttons	
Inserting Batteries into the MIO R-1 AUDIO	
Battery Low Indicator	
Programming The MIO R-1 AUDIO	
Using Connector Ports on The MIO R-1 AUDIO	
IR Code Matrix	
Configuration Mode	
IR Transmit Mode	
Timeout Adjustment	
Download Mode	
Debug Mode	8
Battery Type	8
LED Awake Brightness	8
Sleep Brightness	8
Setting The IR Frequency	8
Updating MIO R-1 AUDIO Firmware	9
Persistent Serial Commands	. 10
MIO Remote Charging Base	11
Specifications	. 11
Installing The Rechargeable Battery	. 12
Charging The MIO Remote with Charging Base	
Changing Battery Modes	. 14
Configuration Mode	. 14
Battery Type	. 14
Using the MIO R-1 AUDIO Remote	15
Tone Control & SRS Setting	. 15
SRS (WOW, Bass Boost, 3D and Focus) Settings	. 15
Privacy Mode	. 16
Zone Control	. 16
Source Control	. 17
Internal Tuner and Audio Server	. 17
CD and DVD	. 17

Satellite and Other	17
Custom XM	18
Direct Numeric Access	18
Tuners	18
CD Player / Changer	18
Satellite Radio/video	18
Presets 1	19
Creating a Preset	19
Recalling a Preset	19
Clearing All Presets	19
Zone Grouping	20
Adding a Zone To a Group	20
Grouping All Zones	20
Un-Grouping All Zones	20
Group Volume Control	20
Favorites	21
Creating A favorite For A Specific Source	21
Clearing favorite for a Specific Source and Specific Zone	21
Clearing All Favorites for All Sources for specific Zone	21
Alarm	22
Setting Alarm Time	22
Clearing Alarm For A Specific Zone	22
Clearing Alarm For All Zones	22
Keypad Lockout	23
Locking A Specific Keypad	23
Unlocking A Specific Keypad	23
Unlocking All Keypads	23

Overview

The MIO R-1 AUDIO (**FG147-04**) remote provides custom control features, contained in an elegant handheld device, designed specifically for use with Matrix Distributed Audio Systems using Metreau DAS-MET-6SRC and/or DAS-MET-NUM keypads.

The MIO R-1 AUDIO (FIG. 1) controls 6 different device modes, supports 3 macro functions and is capable of executing 219 functions. Selecting a source device sends a command to the master and runs predetermined events associated with that source. Selecting a macro will run predefined events, which might not be associated with sources listed, then return the device to its previous mode.

You will need KeypadBuilder to properly program this device. The application and documentation are available from **www.amx.com**.

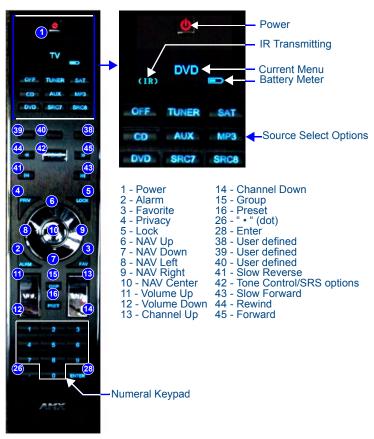


FIG. 1 MIO R-1 AUDIO remote controller

Specifications

The MIO R-1 AUDIO device specifications are as follows:

MIO R-1 AUDIO Speci	fications			
Power Requirements:	4 AAA Alkaline Batteries (included) - approx. 5 hours battery life		
Transmission	AMX 38 KHz/455 KHz IR			
Frequencies		N keypads only support 38 KHz. When used with MET-AUDIO must be set to 38 KHz.		
Transmission	100 feet at 38KHz	• 100 feet at 38KHz		
Range (distance) with MIO IR Receiver	• 50 feet at 455KHz			
Transmission Range (angle)	140 degrees (+/-70° from from the end of the remo	n perpendicular) horizontally from an axis extending ote.		
	• 40 degrees (+/-20° from the end of the remote.	perpendicular) vertically from an axis extending from		
Top Components	LED - blue backlit button	s indicate device is awake		
	• Display (OLED) - 128 x 3	32 pixels, active area is 29.42mm x 7.98mm		
	_ I	button is red backlit; the rest are blue backlit buttons. ttons (3 macro and 6 device).		
Rear Component	Programming Port - 2.5 mm stereo female conductor jack			
	Battery Door			
Dimensions (HWD)	9.50 x 2.00 x .74 (241.3 m	m x 50.8 mm x 18.80 mm)		
Supported Languages:	• English	Korean		
	French	 Mandarin Chinese 		
	German	 Portuguese 		
	Greek	 Russian 		
	• Italian	Spanish		
	Japanese			
Weight	.45 lbs (20 kg) without ba	atteries		
	.55 lbs (25 kg) with batte	ries		
Operating Environment:	Operating Temperature:	0° to 50° C (32° to 122° F)		
	Storage Temperature: -1	0° to 70° C (14° to 158° F)		
Included Accessories:	4 AAA Batteries			
Other AMX Equipment	DB-9 extension cable (F	G10-727)		
	Programming Cable - a 3 wire, 2.5 mm stereo jack (FG10-817)			
	Custom engraving (FG1-	Custom engraving (FG147-01)		
	• MIO-RCC Kit (FG147-03	K)		
	MIO-RCC Charging Bas	e (FG147-02)		
	MIO-RBP Rechargeable	Lithium Ion Battery (FG147-10)		
	MIO Modero IR Receive	r (FG5797-01xx ; xx indicates color)		

Touch And Tilt Sensor

The MIO R-1 AUDIO wakes up upon touching either the chrome side rails or pressing a button. When holding the remote and it times out, you can reawaken the device by tilting it. Errant jostling such as a bumped table will not wake the device unless you are holding it.

MIO R-1 AUDIO Setup

Installing Your Custom Buttons

- **1.** Flip and turn the MIO R-1 AUDIO so that the buttons are facing away from you and the device is upside down.
- **2.** Holding the device in both hands, place your thumbs on the battery door and push up to slide the battery door free.
- **3.** Unscrew the 6 screw points indicated in FIG. 2.

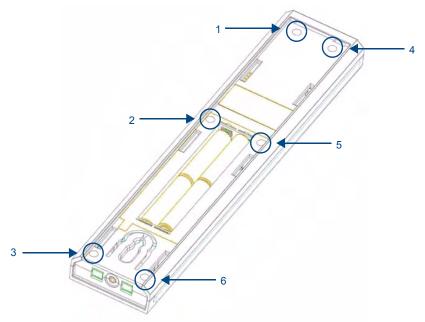


FIG. 2 6 screwpoints (battery compartment cover removed)

- **4.** Turn the unit over so the buttons are facing you.
- **5.** Lift the top assembly away from the PCB.
- **6.** If necessary, push out the standard buttons from the front of the top assembly.
- **7.** Drop on your custom button pad and verify the alignment with the guide posts on the PCB.
- **8.** Place the top assembly back down on the PCB and return the unit over, exposing the 6 screw points.
- **9.** Tighten the 6 screw points.
- **10.** Place the battery door back on the device, slide to lock it in place.

Inserting Batteries into the MIO R-1 AUDIO

To install your 4 AAA batteries into the MIO R-1 AUDIO:

- **1.** Flip and turn the MIO R-1 AUDIO so that the buttons are facing away from you and the device is upside down.
- **2.** Holding the device in both hands, place your thumbs on the battery door and slide the battery door free. The battery door should slide toward the bottom end of the device.
- **3.** Insert the batteries as indicated inside the battery compartment.
- **4.** Place the battery door back on the device, and slide it to lock it in place.

Battery Low Indicator

When the battery charge level is too low to sustain continuous operation, the LCD flashes, "Battery Low" and the device shuts down.

Programming The MIO R-1 AUDIO

Most functionality of the MIO R-1 AUDIO is handled using the application *KeypadBuilder*. Go to **www.amx.com** for the *KeypadBuilder Instruction Manual*.

The MIO R-1 AUDIO recognizes a select number of Serial Commands. For a full list and descriptions, consult *Persistent Serial Commands* section on page 10.

Using Connector Ports on The MIO R-1 AUDIO

The programming jack is used for communication between the device and KeypadBuilder. The programming jack uses a three-wire, 2.5 mm stereo jack, you can order the programming cable (**FG10-817**) from AMX if you do not currently possess one. While loading your configuration file make sure the device is situated as such that the batteries will not fall out. The load will fail if your batteries fall out during the process. The MIO communicates at 115200 baud rate.

To download KeypadBuilder Configuration Files:

- 1. Set the MIO R-1 AUDIO Download mode to ON. See the Configuration Mode section for details.
- **2.** Flip and turn the MIO R-1 AUDIO AUDIO so that the buttons are facing away from you and the device is upside down.
- **3.** Holding the device in both hands, place your thumbs on the battery door and push up to slide the battery door free.
- **4.** Connect the 2.5 mm stereo plug (male) end of the programming cable (**FG10-817**) into the programming jack on the bottom side of the remote device.
- **5.** If necessary, connect the DB-9 end of the programming cable to the female DB-9 connector on the DB-9 extension cable (**FG10-727**).
- **6.** Connect the female DB-9 terminal end of the extension cable to the port on the back of your computer.
- **7.** Configure the communication parameters in KeypadBuilder.

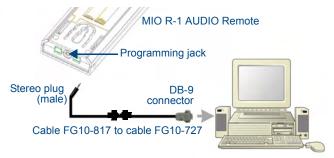


FIG. 3 Connecting The MIO to Your PC

IR Code Matrix

The IR Code emitted depends upon which of the 6 configurable modes is selected. Below is the list of codes for each button within each mode.

IR Code Matrix							
Button	Label	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6
1	Power Symbol	9	49	89	129	169	209
2	GUIDE	38	78	118	158	198	238
3	EXIT	37	77	117	157	197	237
4	MENU	31	71	111	151	191	231
5	INFO	39	79	119	159	199	239
6	A	32	72	112	152	192	232
7	▼	33	73	113	153	193	233
8	4	34	74	114	154	194	234
9	>	35	75	115	155	195	235
10	SELECT	36	76	116	156	196	236
11	VOL +	24	64	104	144	184	224
12	VOL -	25	65	105	145	185	225
13	CH +	22	62	102	142	182	222
14	CH -	23	63	103	143	183	223
15	LAST	40	80	120	160	200	240
16	MUTE	26	66	106	146	186	226
17	1	11	51	91	131	171	211
18	2	12	52	92	132	172	212
19	3	13	53	93	133	173	213
20	4	14	54	94	134	174	214
21	5	15	55	95	135	175	215
22	6	16	56	96	136	176	216
23	7	17	57	97	137	177	217
24	8	18	58	98	138	178	218
25	9	19	59	99	139	179	219
26	INPUT	29	69	109	149	189	229
27	0	10	50	90	130	170	210
28	ENTER	21	61	101	141	181	221
29	A (Macro 1)	250	250	250	250	250	250
30	B (Macro 2)	251	251	251	251	251	251
31	C (Macro 3)	252	252	252	252	252	252
32	TV (Mode 1)	241	241	241	241	241	241
33	SAT (Mode 2)	242	242	242	242	242	242
34	DVD (Mode 3)	243	243	243	243	243	243
35	CD (Mode 4)	244	244	244	244	244	244
36	AUX (Mode 5)	245	245	245	245	245	245
37	LGHT (Mode 6)	246	246	246	246	246	246
38	STOP ■	2	42	82	122	162	202
39	REC ●	8	48	88	128	168	208
40	PAUSE II	3	43	83	123	163	203

IR Code Matrix (Cont.)							
Button	Label	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6
41	S. REV I€	7	47	87	127	167	207
42	PLAY ►	1	41	81	121	161	201
43	S. FWD ₩I	6	46	86	126	166	206
44	REW ≪	5	45	85	125	165	205
45	FWD ▶	4	44	84	124	164	204

Configuration Mode

The configuration mode allows you to set the following device features:

- IR Transmit Mode (38 KHz or 455 KHz)
- Timeout Adjustment
- Download Mode
- Debug Mode
- Battery Type
- LED Awake Brightness
- Sleep Brightness

To enter configuration Mode:

- 1. Press and hold the STOP button and the INPUT button. The two buttons must be pressed within 0.1 seconds of each other and held down for 2 seconds. The device indicates you are now in configuration mode. See below for available modes.
- **2.** Press the **EXIT** key when you are finished.

Note: Your settings will not be lost in the event your batteries die or are removed.

IR Transmit Mode

Pressing button "1" on the remote toggles the IR transmission mode between 38Khz and 455Khz. The display indicates the current mode.

Timeout Adjustment

Press button "2" on the remote to change the sleep timeout from the default. Each time "2" is pressed, the sleep timeout raises incrementally. The pre-determined sleep time-outs are:

- 3 seconds
- 6 seconds
- 9 seconds
- 12 seconds

The display indicates the selected sleep timeout.

Download Mode

Pressing "3" on the remote toggles the Download mode OFF and ON. The Download mode must be ON before you can download a file to the MIO R-1 AUDIO. While the Download mode is ON the device will not go to sleep. A power cycle will return the device to Download OFF.

Debug Mode

Pressing button "4" on the remote toggles development mode between ON and OFF. The display indicates the selected mode. In development mode, the display shows the IR code assigned to buttons when pressed.

This mode is useful to the programmer when determining what IR codes are associated to each mode.

Battery Type

Pressing button "6" on the remote toggles the battery type between Normal and Recharge. The display indicates the selected type. The type of battery in the MIO R-1 AUDIO dictates the battery type you need to set.

LED Awake Brightness

Pressing button "7" on the remote toggles the Power LED brightness mode from LOW to MED and then HIGH. The display indicates the selected mode.

Sleep Brightness

Pressing button "8" on the remote toggles the Sleep brightness mode from OFF to LOW and then MED. The Sleep brightness is the state the MIO R-1 AUDIO assumes while in the charging cradle.

Setting The IR Frequency

The MIO R-1 AUDIO is set to the IR frequency 38KHz by default. You need to utilize the IRMODE Serial Command to change the frequency to 455KHz. To set the frequency to 455KHz:

- 1. Establish a HyperTerminal session with your device.
- **2.** Send "IRMODE 455" to the device.
- **3.** Close the HyperTerminal session.

The command, "IRMODE 38" switches the device back to 38KHz.

Updating MIO R-1 AUDIO Firmware

Updating firmware in the MIO R-1 AUDIO is also done through the programming jack. To update the main firmware for the MIO R-1 AUDIO:

- 1. Connect the MIO R-1 AUDIO to your computer via the programming jack (FIG. 3).
- **2.** Put the device into *Download* mode, as shown on page 7.
- 3. Open NetLinx Studio.
- **4.** Set the *Master Communication Settings* to *Axcess Master* and set the baud rate to 115200.
- **5.** Go to **Tools > Firmware Transfers > Send to Axcess Device...** This opens the *Send to Axcess* Dialog Window(FIG. 4).

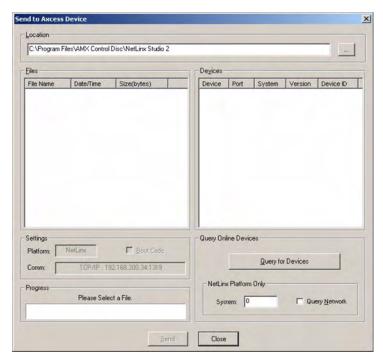


FIG. 4 Send to Axcess Dialog Window

- **6.** Browse to the location of the firmware file.
- **7.** Select the file within the *Files* frame.
- 8. Click Query for Devices.
- **9.** The Query For Devices field will display a complete list of all devices currently connected to NetLinx Studio capable of accepting the firmware file selected. Select the MIO R-1 AUDIO.



In most cases, the MIO R-1 AUDIO is the only device on the list.

- 10. Click Send.
- **11.** After device firmware download, check one more time to verify the firmware version change.
- 12. Click Close.
- **13.** Upon confirmation of a successful send, you can exit NetLinx Studio and disconnect the programming jack.

Persistent Serial Commands

There are a select number of persistent commands the MIO R-1 AUDIO recognizes. Establish a HyperTerminal session with your device to use the following commands:

Serial Commands	
@BRT	Set Brightness level
	Syntax:
	"'BRIT- <awake brightness="" level="">,<sleep brightness<="" td=""></sleep></awake>
	level>'"
	Variables:
	brightness level # = a value from 0 - 32.
	""@BRT-#"" (Set LED Awake brightness level)
	""@BRT-#,#" (Set LED Awake brightness level, sleep brightness level)
	Example:
	(1) "'@BRT-16'"
	Sets the awake brightness level to 50%.
	(2) "'@BRT-32,5'"
	Sets the awake brightness level to 100% and sleep brightness level to approximately 15%
IRMODE #	Sets the IR transmission frequency to either 455KHz or 38KHz.
	Syntax:
	"IRMODE #"
	Variables:
	# = 455 or 38
	Example:
	"IRMODE 455"
	Sets the IR transmission frequency to 455KHz.
SLEEP-#	Force the device into screen saver mode.
	Syntax:
	"'SLEEP-#'" (timed sleep; a persistent command)
	Variables:
	# = 0 - 60 in seconds; time to wait before going to sleep. Default is 30. 0 sets the device to never sleep.
	Example:
	SEND_COMMAND Panel,"'SLEEP-45'"
	Forces the device into screen saver mode after 45 seconds.

MIO Remote Charging Base

The MIO remotes are complemented either with a MIO-RCC charging base (**FG147-02**) or the MIO-RCC rechargeable upgrade kit (**FG147-03K**). One charging base, a new back housing and a MIO-RBP rechargeable lithium ion battery (**FG147-10**) are included with the rechargeable upgrade kit. The charging base upgrade kit transforms the MIO R-1, R-2 and R-3 into a rechargeable device.

Begin with *Installing The Rechargeable Battery* for the MIO-RCC rechargeable upgrade kit (**FG147-03K**) or *Charging The MIO Remote with Charging Base* for the MIO-RCC charging base (**FG147-02**).

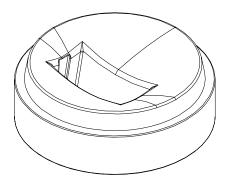


FIG. 5 MIO-RCC Charging Base

Specifications

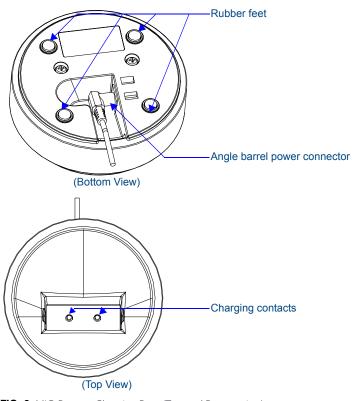


FIG. 6 MIO Remote Charging Base (Top and Bottom view)

The specifications	s for the MIO remote	charging base and	d kit are as follows:

MIO-RCC Remote Cl	narging Kit (FG147-03K) with Base (FG147-02) Specifications
Dimensions (HWD)	Charging Base - 1.61 (4.09 cm) (height); 4.25 (10.80 cm) (diameter)
	Lithium Ion Battery - 2.13" x 1.38" x .28" (5.41 cm x 3.45 cm x .71 cm)
Weight	1.15 lbs (.52 kg) - Remote Charging Cradle
	.15 lbs (.07 kg) - Power Supply
	.06 lbs (.027 kg) - Rechargeable Lithium Battery
Included Items:	Rechargeable Lithium Ion battery (4 hours battery life) Kit only
	Back housing Kit only
	MIO-RCC Charging base (FG147-02) with Power Supply
	Power supply <i>Kit only</i>
Other AMX Equipment:	MIO-RCC Charging Base (FG147-02) with Power Supply
	• MIO R-1 (FG147)
	• MIO R-2 RF 418 (FG147-418)
	• MIO R-2 RF 433 (FG147-433)
	MIO-RBP Rechargeable Lithium Ion Battery (FG147-10)
	AXR-RF 418 MHZ RF Receiver (FG782-418)
	AXR-RF 433 MHZ RF Receiver (FG782-433)
	MIO Modero IR Receiver (FG5797-01xx; xx indicates color)

Installing The Rechargeable Battery

- **1.** Flip and turn the MIO R-1 so that the buttons are facing away from you and the device is upside down.
- **2.** Holding the device in both hands, place your thumbs on the battery door and push up to slide the battery door free.
- **3.** If present, remove the AAA batteries.
- **4.** Remove the 6 screws shown in FIG. 7.

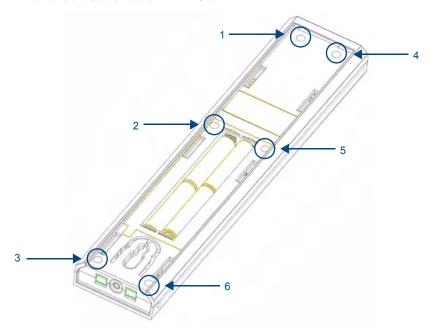


FIG. 7 6 screwpoints (battery compartment cover removed)

- **5.** Remove the back housing.
- **6.** Place the new housing on the device so that the rechargeable battery port connection is now accessible. See FIG. 8.
- **7.** Replace the 6 screws.
- **8.** Connect the terminal end of the Lithium-Ion battery to the port shown in FIG. 8. It may be necessary to use a thin, blunt object to fully seat the battery connector within its port.

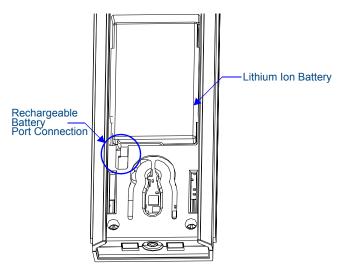


FIG. 8 Rechargeable Battery Port on The MIO Remote

- **9.** Press the battery between the rubber pads, with sticker showing, in the housing area of the MIO remote. Confirm battery is flush with bottom of battery enclosure on bottom housing.
- **10.** Replace the battery door and slide to lock it in place.
- **11.** Begin charging the battery.

Charging The MIO Remote with Charging Base

The MIO remotes receive power for charging from a charging base.

- 1. Connect the terminal end of the power supply to the bottom external power port on the MIO remote charging base. See FIG. 6 for location.
- **2.** Route the cable through the provided channel so that it comes out the side of the base.
- **3.** Connect the power cord to an external power source.
- **4.** Place the bottom of the MIO remote into the charging base so the contacts on the device are on top of the charging contacts inside the charging base. The Power LED on the MIO remote blinks red to indicate it is charging and illuminates solid red when it is done. Full charge cycle for a depleted battery is approximately 3 hours.

Avoid placing units equipped with AAA batteries in the charging base.

Changing Battery Modes

Configuration Mode

The *Configuration* mode allows you to set the battery type. To enter *Configuration* mode:

1. Press and hold the **STOP** button and the **INPUT** button simultaneously. The two buttons must be pressed within 0.1 seconds of each other and held down for 2 seconds. The device indicates you are now in *Configuration* mode.

Battery Type

- **2.** Pressing button **6** on the remote toggles the battery type between *Normal* and *Recharge*. The display indicates the selected type. The type of battery in the MIO R-1 dictates the battery type you need to set.
- **3.** Press the **EXIT** key when you are finished.



Your settings will not be lost in the event your batteries die or are removed.

Using the MIO R-1 AUDIO Remote

Tone Control & SRS Setting

To access the Tone Control and SRS settings, press the TONE button (FIG. 1). This enables the Tone Control Mode with BASS as the first mode selected.



FIG. 1 TONE button

There are 3 Tone Control Modes available for adjustment, and 4 SRS options, as follows:

- BASS: Increase / Decrease from -10dB to +10dB (Up/Down NAV buttons)
- Treble: Increase / Decrease from -10dB to +10dB (Up/Down NAV buttons)
- Balance: Left / Right (Up NAV button = right, Down NAV button = left)
- SRS options: BASS Boost, Focus, 3D, WOW

When first entering Tone Control Mode, BASS mode is active. To move from mode to mode, select the Center NAV button. This saves the setting and moves to the next mode.



While in each of the modes, press the Center NAV button to return to the default for that mode.

SRS (WOW, Bass Boost, 3D and Focus) Settings

Use the UP Nav button to cycle through the SRS Settings: BASS Boost, Focus, 3D, WOW (in that order). Use the Down NAV button to cycle backwards to the previous SRS setting.

- Press & hold the Center NAV button to disengage/clear the SRS settings (none of the SRS modes will be engaged).
- Press the Center NAV button save SRS Mode & exit from Tone Control set-up.

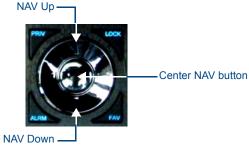


FIG. 2 Center NAV button

Only one SRS mode can be engaged per room/zone. Each room/zone, however, can have a different SRS mode.

Moving from one SRS position to another disengages the original setting (for example, moving from WOW to BASS BOOST disengages WOW).

Privacy Mode

When the privacy feature is engaged, the room/zone cannot be paged, apart from this, the room/zone will function normally.



To use the privacy feature in a specific zone, the keypad must be OFF (no sources selected)

- To engage Privacy mode, press the Privacy (PRIV) button.
- To disengage, press any Source or Navigation button.



Privacy (PRIV) button

FIG. 3 Privacy (PRIV) button

Zone Control

• To turn a single Zone ON, press any Source button (or press the Power Button).



If the Power button is pressed, the zone will turn ON and will remember which source was previously ON.

- To turn a single Zone OFF, press the Power button.
- To turn a specific Source ON in all Zones, press & hold any Source button (the selected source will turn on and play in all zones).
- To turn a specific Source OFF in all Zones, use the OFF button to perform System OFF.
- To Turn All Zones OFF (System OFF), Press the OFF button. All zones will be turned off, and no sources will play.

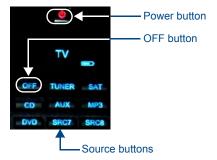


FIG. 4 Power, OFF and Source select buttons



One minute after an ALL OFF has been performed, the Controller and all Sources will be powered down.



Pressing Source Buttons switches between sources and turns the Source On, but does not toggle between ON and OFF.

Source Control

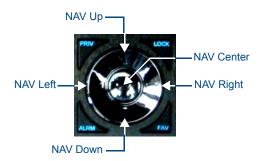


FIG. 5 NAV array

Internal Tuner and Audio Server

NAV Button	Internal Tuner	AUDIO SERVER
NAV Up	SEEK UP	NEXT
NAV Down	SEEK DOWN	PREVIOUS
NAV Left	Prev PRESET	Prev PAGE
NAV Right	Next PRESET	Next PAGE
NAV Center (press)	AM/FM	SELECT
NAV Center (press/hold)	Stereo/Mono	User Defined 1

CD and DVD

NAV Button	CD	DVD
NAV Up	Next TRACK	UP
NAV Down	Prev TRACK	DOWN
NAV Left	Prev DISC	LEFT
NAV Right	Next DISC	Right
NAV Center (press)	User Defined1	Select
NAV Center (press/hold)	User Defined2	Menu

Satellite and Other

NAV Button	External Satellite	Other
NAV Up	Next Channel	User Def UP
NAV Down	Prev Channel	User Def DOWN
NAV Left	Guide Down	User Def LEFT
NAV Right	Guide UP	User Def RIGHT
NAV Center (press)	Select	User Def SELECT
NAV Center (press/hold)	Guide	User Def HOLD SELECT

Custom XM

NAV Button	CUSTOM XM
NAV Up	UP
NAV Down	DOWN
NAV Left	LEFT
NAV Right	RIGHT
NAV Center (press)	CENTRE
NAV Center (press/hold)	CEN hold

Direct Numeric Access



FIG. 6 Direct Numeric Access buttons

Tuners

Enter the station identification and press ENTER.

- Strings of 3 to 4 numbers are recognized.
- If a " " (dot) is part of the string, then an FM station is assumed, otherwise an AM station is assumed.

Examples: 1050 + ENTER= 1050AM, 104 • 5 + ENTER = 104.5FM

CD Player / Changer

To select a specific Disc & Track, the format is DDD • TTT + ENTER (DDD=Disc, TTT=Track).

Example: 11.11 + ENTER = Disc 11, Track 11

To select a specific track on the current disk, enter TTT + ENTER (TTT=Track).

Example: 3 + ENTER = current disk, Track 3

Satellite Radio/video

Enter the station number and press ENTER. Strings of 2 to 4 numbers are recognized.

Presets

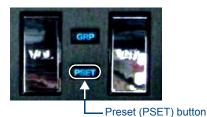


FIG. 7 Preset (PSET) button

Creating a Preset

- 1. Select the source.
- **2.** Direct Tune to the station of choice (enter station ID + ENTER).
- **3.** Select the "PSET" button.
- **4.** Key in the preset number (1 10).
- **5.** Press & Hold ENTER.

 Example: Tune to 1050AM; press PSET; 5 + press/hold ENTER (stores 1050AM as preset #5).

Recalling a Preset

- **1.** Select the source
- **2.** Press the "PSET" button.
- **3.** Key in the preset # (1 10).
- 4. Press ENTER.

Clearing All Presets

- **1.** Select the source.
- **2.** Press the "PSET" button.
- **3.** Key in "00".
- **4.** Press & Hold ENTER.

Zone Grouping

In this state, zones can be "grouped" together and controlled as a single zone. Press the "GRP" button to enter "Group Mode".

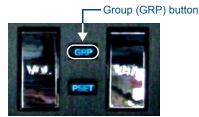


FIG. 8 Group (GRP) button

Adding a Zone To a Group

- **1.** Press the "GRP" button to enter "Group Mode".
- **2.** Key in zone # to add to group.
- **3.** Press ENTER (to exit Group Mode).



The zone from which zone grouping is being administered, is assumed to be the 1st zone in the grouping. It should, therefore, not be added to the grouping.

Grouping All Zones

- **1.** Press the "GRP" button to enter "Group Mode".
- **2.** Key in "99".
- **3.** Press ENTER (to exit Group Mode).

Un-Grouping All Zones

- **1.** Press the "GRP" button to enter "Group Mode".
- **2.** Key in "00".
- **3.** Press ENTER (to exit Group Mode).

Group Volume Control

Adjusting Volume for the entire Group can be made at any time, as follows:

- **1.** Press the "GRP" button to enter "Group Mode".
- 2. Volume UP / DOWN as required (NAV Up/Down buttons).
- **3.** Press ENTER (to exit Group Mode).



All zones will have the volume increased/decreased by the adjustment being made.

To bring all zones to the same volume level (after individual zone adjustments have been made), enter Zone Grouping mode and decrease the volume to 0db, then increase the volume to desired level.

Favorites

One "favorite" can be programmed for each Source, in each Zone.

If a "favorite" is set for a specific source in a specific zone, when that source is turned on (after System has been OFF), the favorite will begin playing in that zone.



FIG. 9 Favorite (FAV) button



Favorites can only be set for Sources that utilize "Direct Access" functionality.

Creating A favorite For A Specific Source

- 1. Select Source.
- **2.** Key in a direct entry string.
- 3. Press FAV button.
- 4. Press ENTER.

Examples:

- Tuner + 104.5 + "FAV" + ENTER (104.5FM is saved as the favorite).
- CD + 2.4 + "FAV" + ENTER (Disc 2/Track 4 is saved as the favorite).

Clearing favorite for a Specific Source and Specific Zone

- 1. Select Source.
- **2.** Press "FAV" button.
- **3.** Key in "00".
- 4. Press ENTER.

Clearing All Favorites for All Sources for specific Zone

- 1. Press "FAV" button.
- **2.** Key in "00".
- **3.** Press & Hold ENTER.

Alarm

When the alarm time is reached, the source selected will turn ON and the volume will ramp up to the set volume and begin playing. At this point the source will behave normally.



- Alarm (ALRM) button

FIG. 10 Alarm (ALRM) button



If a favorite has been set, the favorite will begin playing, else, the last station/CD will begin playing.



To use the Alarm feature, a System Time must first be entered on the Main Controller, via the Front Controller LCD.

Setting Alarm Time

- 1. Select Source & adjust the Volume to desired level.
- **2.** Press "ALRM" button.
- **3.** Key in 24 hour alarm time (use "?" to separate Hours and Minutes).
- 4. Press ENTER.

Example: Press "ALRM" + 6?30 + ENTER (alarm set for 6:30 AM).

Clearing Alarm For A Specific Zone

- 1. Press "ALRM" button.
- **2.** Key in "00".
- 3. Press ENTER.

Clearing Alarm For All Zones

- 1. Press "ALRM" button.
- **2.** Key in "00".
- **3.** Press/hold ENTER.

Keypad Lockout



FIG. 11 Lockout (LOCK) button

Locking A Specific Keypad

- **1.** Press "LOCK" button.
- **2.** Enter the room/zone # to lock.
- 3. Press ENTER.

Unlocking A Specific Keypad

- **1.** Press "LOCK" button.
- **2.** Enter the room/zone # to UNLOCK.
- **3.** Press & Hold ENTER.

Examples:

- Press "LOCK" + 2 + ENTER (keypad in zone #2 will be locked).
- Press "LOCK" + 4 + ENTER (keypad in zones #2 & #4 will be locked).
- Press "LOCK" + 2 + press & hold ENTER (keypad in zone #2 will be unlocked, keypad in zone #4 remains locked).

Unlocking All Keypads

- 1. Press "LOCK" button.
- **2.** Enter "00".
- 3. Press/Hold ENTER

Examples:

- Press "LOCK" + 2 + ENTER (keypad in zone #2 will be locked).
- Press "LOCK" + 4 + ENTER (keypad in zones #2 & #4 will be locked).
- Press "LOCK" + 00 + press & hold ENTER (Keypads in Zones #2 & 4 will both be unlocked).

Using the MIO R-1 AUDIO Remote

Using the MIO R-1 AUDIO Remote



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